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# The Forum

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## STATISTICS *VERSUS* SOCIALISM.

THE first settlements in this country were made by people seeking a larger degree of freedom than that which they had enjoyed in Europe. They sought not merely religious and political freedom, but social and industrial freedom as well. They desired a field for enterprise and personal initiative. Europe had progressed along this line slowly from century to century for three or four hundred years; but even as late as 1600 social freedom had not made any great progress. It is true there had been a movement in all Northern Europe toward the right of private judgment in matters of religion. This was Protestantism; and it was followed by a revolt against the divine right of kings, especially in England. Individualism, for all this, did not gain very much at home in Europe, but acted chiefly to drive peoples out from Europe on adventures, and to colonize America. Thus North America came to be settled by people who desired above all things to be free from dictation on the part of the social whole. Each individual wished to reap the fruits of his own deeds, and to be called upon to make as small a contribution as possible to his colonial government; and, as to contribution to the home government in Europe,—he desired to be rid of that altogether. This sturdy discipline of individuality went on for a hundred and fifty years, more or less; and then came the Declaration of Independence on the part of the North American colonies. The United States, as a separate nation, has now completed a hundred years more of individualistic growth. This movement culminated in the Civil War, in which the majority of the nation compelled the minority to recognize the individual rights of an inferior race, and emancipate it from the domestic slavery in which it had been nurtured for two hundred years. The modern spirit could not endure slavery, because that institution takes no recognition of the deeds of the individual. It gives him subsistence, food, clothing, and shelter, whether he earn much or little. It recognizes the right to life, but not to liberty. Individualism values liberty more than life.

The chief occupation of civilization in the last fifty years of its career has been to emancipate each person from the control of the



family, the civil community, the state, and the church, wherever that control has trammelled the exercise of liberty.

This protest has not been limited to America. It has been active in Great Britain and France, and, to a less degree, in the other countries of the Continent of Europe. The Age of Revolution, as it is sometimes called, has this significance. It has attacked all manner of restraints and impediments to liberty, and demanded that every man shall have the right to the fruit of his deeds, shall have a chance of a career, and be allowed to shape for himself the niche he is to fill. The slave shall be declared a free man, be permitted to choose his vocation, make contracts with his employers, or work for himself if he prefer; or refrain from work altogether, provided he can render an equivalent for what he demands and receives from his fellow-men.

Up to the present, the attainment of liberty has been the ideal of our civilization. We look forward to greater possibilities for each person in the way of conquests over nature. We demand greater freedom in choosing one's habitat, a greater exercise of arbitrary choice in selecting one's vocation. Increasing numbers of young men begin with a life of adventure: they seek their fortunes on distant borderlands. Indeed this is so characteristic that our civilization has been called a borderland civilization. A large extent of territory in North and South America, in Africa and Australia, and the isles of the sea, is visited by adventurers of European descent. They are intent on subduing these borderlands and colonizing them,—building civilization in place of the savagery and barbarism that they find there.

But a counter-movement is already in progress; while our individualism is at a higher point than it has ever before reached. Many of those persons who advocated the emancipation of the Southern slave, and who contended with the ballot and the sword for his freedom to choose his vocation and enter into competition with the white laborer, now abandon the ideal of competition and adopt that of socialism. They would argue that it is better, not only for the colored man, but for the white man, to give up individual adventure, and to accept such an organization of society as would determine the career of each member of it and apportion to him his share of the productions of the industry of the whole. A small percentage of the citizens of the United States hold this theory of socialism in the full application of its principle; but very many have adopted some parts of the scheme, perhaps without seeing the drift of the reform which they would introduce into the community.



For purposes of clear thinking in this matter it is necessary to keep in mind that the doctrine of individualism would limit the function of political government to removing obstacles that are in the way of free action on the part of the individual and of the return upon him of his own deed. Government must help each person to help himself. Any help given by it which has the effect of weakening his power of self-help and undermining his individuality is contrary to this principle. But socialism, properly so called, seeks the help of the individual by the social whole in order that he shall share equally in the products of all without reference to his producing power. He shall have food, clothing, shelter, and culture,—yes, although he is a person most inefficient in deeds, he shall share equally with those who can and do produce most. The goods of this world shall be distributed not to the producers of them, but *pro rata* to all living human beings. Life, and not work, shall be the basis of distribution.

The appearance of this socialistic standard in our political history has been preceded by the adoption of pessimistic views with regard to the trend of the existing system of competitive industry. In almost all cases the reformer confines his view to the weaklings of society, the paupers, criminals, and individuals who are least able to compete with their fellow-men for a subsistence. In the presence of the slums of the East End of London and of New York he pronounces the competitive system a failure. He glances from these people to the class of extremely wealthy persons which has grown up and is increasing in all countries where productive industry has adopted the use of machinery. In the language of Henry George, he “sees the persistence of poverty amid advancing wealth,” and pronounces judiciously upon the failure of the competitive system by affirming that “under it, as a system, the rich are growing richer and fewer and the poor are growing poorer and more numerous.”

In his work on *Capital*, Karl Marx, the philosophic leader of socialism, gives utterance to the following statement as a law of political economy in modern competitive industry, in which he thinks that the centralization of capital has proceeded so far as to turn laborers into slaves by absorbing all the products of their labor except the bare means of subsistence:—“Along with the constantly diminishing number of great capitalists who monopolize the instruments of production, there is a constantly increasing mass of misery, oppression, bondage, deformity, and extortion.” This I take to be the origin of that famous jeremiad of Henry George which I have quoted above. Or, as Dean

Farrar gave it in a recent article in the "North American Review": "While the rich are growing richer, the great masses of the poor are growing relatively poorer." In Henry George's "Progress and Poverty," this supposed law of society based on competition is quoted with tragic emphasis.

Again, it is used by Bellamy in his "Looking Backward." He says:—

"The nation became the sole employer, and all the citizens, by virtue of their citizenship, became employees, to be distributed according to the needs of industry [not self-distribution or free choice of vocation]. . . . The nation guarantees the nurture, education, and comfortable maintenance of every citizen from the cradle to the grave." (Pp. 85, 123.)

Look for a moment at the relation of the remedy to the disease. The disease is inequality of wealth in the community, caused primarily by thrifty habits in a portion of the community opposed to unthrifty habits in the remaining portion, and the effect extended by inheritance. There are industry, skill, frugality, and temperance opposed to idleness, lack of skill, wastefulness, intemperance. The old remedy for this was to correct by some means the unthrift, and to teach the weaklings of society to become industrious, economical, and skilful. The new remedy proposes to abolish altogether the idea of thrift as a trait of character by removing all occasion for its exercise. There shall be no individual accumulation of property. It shall be produced by the state and distributed by the state not on the basis of productive power, but on the basis of abstract citizenship,—on the basis of existence rather than of activity, of being rather than of doing.

This of course is not reform, but revolution. A physician proposes to cure the body; but the socialistic remedy proposes to get rid of the body altogether. Free proprietorship and competition have incidental evils; therefore abolish private property, root and branch. To the question, "What shall we do for the submerged tenth?" the reply is: "Submerge the other nine-tenths."

However objectionable this may seem to the enterprising and energetic youth, yet if the supposed law of Marx be true, then Henry George and Edward Bellamy are right in looking for another and better system of industry than the competitive system.

It is important, then, to have this question of the trend of modern productive industry settled by an accurate canvass of the statistics in this country and in all countries of the world where any system of industry prevails.



If we must incline to the side of the Socialists and believe, with them, that the present structure of our industrial civilization is so organized that the rich become richer and fewer, and the poor poorer and more numerous, and that the middle class is sinking to the level of the poor, we must all admit that there is need of a revolution, and that a mere reform is not sufficient. The system cannot be reformed: it must be radically changed.

Statistical data are therefore needed, in the first place, to show the production of wealth and its distribution in different epochs—at some recent date, say 1890 or later, and some earlier date contemporary with the beginning of the modern era of steam transportation, say 1830 or 1840. Also at some still older date contemporary with the beginning of the era of machinery: in Great Britain 1780 or 1800; in this country 1820.

In the countries where a carefully graded income tax has existed, as in Great Britain, France, Italy, there ought to be found the data for close estimates, if the exact statistics needed are not accessible in official records. Mr. Dudley Baxter, in 1867, estimated the national income or total production of the United Kingdom, and classified the people according to wealth and poverty. About the same time Leone Levi undertook similar researches. Since then, Robert Giffen, head of the statistical department of the British Board of Trade, and president of the Statistical Society of Great Britain, has written numerous papers, in his careful and judicial spirit, going over the data which bear upon this important question of the distribution of wealth, not only in his nation, but in other nations which publish income returns. His two series of essays and his "The Growth of Capital" are the best works we have on the subject. Mulhall's "Dictionary of Statistics" brings together a vast amount of statistical data under the heads of Income, Wealth, Finance, Occupation, Prices, Agriculture, Manufactures, Commerce, Taxes, and similar topics. The items that he gives are of more or less value according to the authorities from which they are compiled, or in proportion to the good luck of Mr. Mulhall in guessing the results from such data as he could find. The latest edition of his work (1892) is of much greater value than the former editions, because its author takes more pains to give his authorities. But his newest work, "The Industries and Wealth of Nations" (1896), is better still, because he explains his rules of making estimates. One great merit must be conceded to Mr. Mulhall, namely, he has seen from the beginning what statistical items are useful in settling our new social and political problems. He



has seen, too, that this class of statistics must be studied after the method of Engel, who undertook to fix the annual budget of family expenses in the different classes of society,—so much for food, for clothing, for rent and fuel,—how much saved, etc. Such average ratios as exist between the different items of production and consumption must be discovered. Then it will be easy to arrive at approximate accuracy by indirect methods.

So long as the Census does not give us the needed data, nor our experts make for us careful estimates, there will be wild guesses, based on isolated facts of a sensational character,—facts that are exceptional, collected for the purpose of proving the impossibility of reform and the necessity of revolution. In other words, if we do not have sound statistics we shall have hysterical statistics.

In what follows I quote various statistical items, and offer them as approximations, useful in helping an intelligent discussion of the new theories. In most cases it is easy to agree upon maxima and minima. For example, our daily productions per inhabitant will not exceed sixty cents per day nor fall short of forty cents; the amount paid for the use of land per inhabitant will not fall short of two cents per day, nor will it exceed five cents. Such maxima and minima being fixed, it is possible to begin to think rationally along these lines, and to discredit hysterical conclusions.

The statistical bureaus, State and national, should be more amply endowed than they have been, and more encouragement should be given to special investigations touching the great social question of the production and distribution of wealth. It is surprising to think that it is impossible to tell what the items, "Land,"—pure and simple,—and "Improvements on Land," amount to in any country of the world. Nor even the improvements in the shape of buildings can be told, except from Col. C. D. Wright's Census for Massachusetts in 1885. And yet this item could be fixed with close approximation for State and nation, if the Census bureaus were properly supported. To mention one of the questions that depend on this datum, the single-tax theory could be confirmed or refuted by showing the actual status and trend of the land factor in the production of wealth.

The uninitiated student of English statistics is delighted at first to find the items, "Land" and "Houses," separated. But, after discovering some discrepancies, he is led to inquire more carefully into the use of these technical terms, and is disgusted to find that "Land" means rural property,—not only farms, but also the buildings on them,—and

that "Houses" means buildings in villages and cities together with the lots of ground on which they stand. The following quotations from Mr. Giffen's "The Growth of Capital" will show how confusing this is to an American reader, who would never suspect that "lands" mean farms and farm buildings, while "houses" and "buildings" mean city houses and the lots on which they stand:—

"Lands, from constituting at the beginning of the period 60 per cent of the country, and while forming as late as 1865 about 30 per cent of the property, do not now constitute 20 per cent of the total, there having also been in the most recent years an absolute decrease in amount, while other capital is increasing. Houses, on the other hand, maintain a rather increasing proportion of a total property which is itself constantly increasing in amount; and in the last period of all this tendency has been accentuated till houses—buildings—have come to constitute a fifth part of the total property of the country." (P. 112.)

"If in a country like England we find land at one historical period to constitute 60 per cent or upward of the total wealth, and then by a gradual descent to be less than 20 per cent, the value of the land itself almost all the while steadily increasing, then, in spite of inexactness in the figures, the broad fact is in many ways instructive. Whether the change, if more exactly described, would be from, say 65 or 55 to 25 or 15 per cent, the nature of the change would hardly be affected, while it is obvious that the limit of possible error is not nearly so wide. In comparing England with France, again, or with the United States, it is at once obvious that economic conditions are entirely different, seeing that England has less than a fifth of its wealth in land, while France has half, or more than half, and the United States more than a third." (P. 146.)

"These figures for France. By far the most important item, it will be observed, is that of real property not built upon, answering to the lands in our returns, and for this figure there are undoubtedly abundant data, the net income and selling value (the latter through the registration duties on the transfer of property) being matters of official record. In point of fact, the selling value of real property not built upon in France was officially reckoned by the French Financial Administration in 1882 at 3,663 millions sterling, so that M. de Foville's figure in the above estimate shows a considerable falling off. There are similar means of dealing with the next great item, the house property, which seems to me rather more highly valued than similar property in the valuation of the United Kingdom, if we assume,—as I suppose we may,—that farmhouses are valued with the land, but still not so highly valued as to make the comparison wholly out of place." (P. 128.)

Mr. Mulhall's statistics for all countries, likewise, make land mean country, and houses city property.

I consider the most important item of economic statistics to be that which shows the total product of the State or nation in the form of the average per day for each inhabitant. This item helps the individual citizen to compare his daily wages or his annual income with the quota which he would receive in case the total product of his State or nation



were distributed to each inhabitant without any deductions for capital, for land, or for supervision.

A continual view of this ratio is most healthful for all members of the community. Any person socialistically inclined will ask himself, What does my whole State (Massachusetts, for example), or my nation (the United States, or Russia, or France) produce per day per inhabitant? Taking the wage-earners as about one-third of the population, let each one multiply the average quota per inhabitant for the United States by 3 and compare it with the wages he himself is receiving. The result is astonishing to most persons who take pains to get an accurate inventory of the productions of the nation. According to the last Census, the total value of farm products, including live stock, amounted to \$.108 per inhabitant for the whole United States, the manufacturing products to \$.184, the mining products to \$.0254, making a total in these three great items for each individual of \$.3174 (not quite 32 cents) per day, or \$2.2218 per week, or \$9.522 per calendar month. Multiplying by 3, to obtain the representation of the average wage-earner, we find that he stands for \$6.6654 per week, or \$28.563 per month. The particulars for the several States are given in the following table:—

AMOUNT PER DAY PER INHABITANT, BY STATES. (UNITED STATES CENSUS OF 1890.)

DIVISIONS AND STATES.	Val. Farm Products.	Val. Manufac- tured Products.	Val. Mining Products.
North Atlantic Division.....	\$.066	\$.357	\$.0324
South Atlantic Division.....	.091	.075	.0078
South Central Division.....	.120	.024	.0060
North Central Division.....	.136	.332	.0223
Western Division.....	.141	.152	.1291
NORTH ATLANTIC DIVISION.			
Maine.....	.091	.183	.0337
New Hampshire.....	.100	.277	.0067
Vermont.....	.168	.148	.0468
Massachusetts.....	.034	.508	.0045
Rhode Island.....	.033	.525	.0078
Connecticut.....	.066	.459	.0113
New York.....	.074	.384	.0110
New Jersey.....	.055	.313	.0157
Pennsylvania.....	.063	.291	.0786
SOUTH ATLANTIC DIVISION.			
Delaware.....	.105	.267	.0082
Maryland.....	.070	.210	.0134
District of Columbia.....	.004	.263	.0005
Virginia.....	.070	.063	.0100
West Virginia.....	.073	.054	.0250
North Carolina.....	.085	.030	.0008
South Carolina.....	.122	.031	.0072
Georgia.....	.124	.049	.0045
Florida.....	.085	.071	.0010

DIVISIONS AND STATES.	Val. Farm Products.	Val. Manufac- tured Products.	Val. Mining Products.
SOUTH CENTRAL DIVISION.			
Kentucky.....	.097	.093	.0069
Tennessee.....	.086	.049	.0100
Alabama.....	.120	.041	.0178
Mississippi.....	.156	.018	.0001
Louisiana.....	.133	.060	.0012
Texas.....	.137	.042	.0024
Arkansas.....	.129	.025	.0014
Oklahoma.....	.020	.005	.....
NORTH CENTRAL DIVISION.			
Ohio.....	.099	.224	.0199
Indiana.....	.118	.121	.0121
Illinois.....	.132	.272	.0123
Michigan.....	.109	.161	.0927
Wisconsin.....	.115	.167	.0165
Minnesota.....	.150	.155	.0243
Iowa.....	.228	.066	.0147
Missouri.....	.112	.150	.0163
North Dakota.....	.319	.029	.0009
South Dakota.....	.184	.018	.0307
Nebraska.....	.173	.066	.0007
Kansas.....	.183	.060	.0114
WESTERN DIVISION.			
Montana.....	.130	.065	.6994
Wyoming.....	.101	.058	.0817
Colorado.....	.087	.144	.2734
New Mexico.....	.032	.015	.0823
Arizona.....	.048	.027	.3331
Utah.....	.064	.061	.1539
Nevada.....	.162	.040	.6073
Idaho.....	.125	.025	.2722
Washington.....	.107	.171	.0235
Oregon.....	.166	.171	.0108
California.....	.197	.211	.0447

These estimates take the farm products at the farm and the manufactured products at the mill; but there is an immense industry on the part of the people, namely, that of transportation, which adds to the value of the total product by the time it gets to the hands of the consumer. This item for transportation amounts to \$1,076,940,357 per annum, or \$.047 per day for each person. Besides this, in the agricultural estimate above, there has been no account made of the small gardening and other home agriculture, nor of the home manufactures which relate to the final processes of preparation of food, and especially to the making of clothing—items not reported in the Census. The former item, which will include the product of household gardens and small farms, may be estimated at four cents a day for each inhabitant, or \$14.60 a year. This estimate makes the amount of agricultural productions not reported 37 per cent of the amount reported in the United States Census,—an amount apparently too large. The household manu-



factures which do not get reported in the Census (including cookery, sewing, etc.) are also counted at four cents per day, or \$14.60 a year.

Besides these items there is a large contribution to the wealth of the country in the way of use or rental of houses and furniture already existing. Agricultural tools and machinery have been accounted for in the agricultural product. As regards houses and furniture: Allow for the rental of houses and furniture four cents per day, for railroad building \$.013, and for miscellaneous \$.015. I bring together these items in the following table:—

FOR THE UNITED STATES.	Value for 1889.	Per Inhabitant per day.
Value Farm Products.....	\$2,460,107,454	\$.108
Value Manufactured Products.....	4,210,393,207	.184
Value Mineral Products.....	580,012,600	.0254
Value Products Fisheries.....	44,277,514	.002
Freight Earnings (Land).....	734,525,726	.032
Drayage, etc. (estimated) 18 per cent Freight Earnings.....	157,414,631	.007
Freight Earnings (Water) estimated.....	140,000,000	.006
Expressage (estimated).....	45,000,000	.002
House Rent (estimated).....	680,000,000	.030
Furniture Rent (estimated).....	228,571,212	.010
Railroad Building (estimated).....	300,000,000	.013
Household Manufactures not reported (estimated).....	914,284,848	.04
Agricultures not reported (estimated).....	914,284,848	.04
Miscellaneous (partly estimated).....	342,856,818	.015
Total.....	\$11,751,728,858	\$.5144

The total sum is \$.5144 for each person,—or \$1.5432 for each wage-earner per day, or \$10.80 per week. Any person, therefore, receiving eleven dollars a week receives more than the quota that a wage-earner would receive (representing three persons), provided nothing were paid for interest on capital, for the use of land, or for directive power. It is interesting to compare with this the estimate which Mr. Mulhall makes in his recent book, “The Industries and Wealth of Nations” (1896). Comparing the same with the production per day of each inhabitant of Europe the figures are:—

	Europe.	United States.
Farms.....	\$.057	\$.0955
Manufactures.....	.0774	.23
Commerce and Transportation.....	.0586	.1250
House Rent and Furniture.....	.02	.05
Personal Service and Miscellaneous.....	.052	.102
Total.....	\$.2650	\$.6025

The study of statistics of national earnings is helpful to those who are disposed to think that an equal division would place the entire population in a condition of luxury. But this is only a negative lesson. It is far more serviceable to learn the exact facts regarding the trend or progress of wealth, as respects both its aggregate and its distribution.

The returns from the income tax of Great Britain afford means of tracing the growth of incomes among all classes in that country. The following figures from Leone Levi's "Wages and Earnings of the Working Classes" (for Great Britain) (P. 48) bear directly on the supposed law of Karl Marx:—

Incomes of	1850-51.	1879-80.
	Number.	Number.
\$750 to \$1,500	68,864	241,568
1,500 to 2,500	21,367	61,615
2,500 to 5,000	12,258	29,839
5,000 to 15,000	4,708	11,495
15,000 to 50,000	1,551	4,065
50,000 to 250,000	312	910
250,000 and over	26	77
Total.....	144,322	398,835

The population increased only 33 per cent between 1850 and 1880; but the middle class (incomes \$750 to \$5,000) trebled—102,489 in 1850, to 333,022 in 1880. The moderately wealthy class (incomes \$5,000 to \$15,000) more than doubled (4,708 to 11,495). The laboring class,<sup>1</sup> whose annual incomes are less than \$750, averaged in 1850-51 \$265: in 1881 the average had risen to \$415. One hundred and eighty thousand, or more, had ascended from the poor class into the class paying an income tax.<sup>2</sup>

The production of the United States has risen from an average of thirty cents in 1850 to nearly fifty-one and a half cents per day for each inhabitant in 1890. This estimate, compared with that of 1890, given in cents per day, is as follows:—

<sup>1</sup> See LEVI, "Wages," etc., p. 53.

<sup>2</sup> For similar statistics, comparing 1843 and 1880, see Mr. GIFFEN's article in the "Journal of the London Statistical Society," 1883, and the discussion of the same in "The Present Distribution of Wealth in the United States," by C. B. SPAHR, pp. 93, 94.



	1850.	1880.	1890.
Agriculture (including live stock).....	12.	14.5	10.8
Manufactures as reported.....	5.8	10.8	18.4
From transportation in enhanced value of products	1.2	3.7	4.7
Agricultural product consumed in the household and not reported.....	3.2	4.1	4.
Household manufactures not reported.....	4.8	4.4	4.
Building of railroads.....	.75	1.8	1.3
Mining, fisheries, and miscellaneous.....	.25	2.2	4.24
House and furniture rent.....	2.	3.	4.
Total cents per day for each person.....	30.	44.5	51.44

The increase in aggregate earnings is encouraging; and still more so is the evidence of its distribution among all classes of people.

Since the advent of steam and labor-saving machinery, the average annual production has continued to rise; and the amount saved and handed down for use in succeeding years has grown larger. According to Mulhall's tables<sup>1</sup> steam-power itself has increased in the United States since 1860 from three and one half millions to seventeen millions horse-power in 1895; Great Britain and Ireland from two and one-half to thirteen millions horse-power; Germany from seven-eighths of a million to seven and two-thirds millions horse-power; France from one and one-sixth to five millions horse-power. Italy ( $1\frac{1}{3}$  millions horse-power in 1895), Spain ( $1\frac{1}{4}$  millions), Austria ( $2\frac{1}{3}$  millions), and Russia ( $2\frac{3}{4}$  millions) have not yet become great users of steam; and their productive power per inhabitant is less.

The daily earnings per inhabitant increased as follows:—

	Cents.	Cents.
United Kingdom.....	1860. 43.8 to 49.3 in 1894-5	
France .....	1860. 32.0 to 42.0 in "	
Germany .....	1866. 25.6 to 34.2 in "	
United States.....	1860. 33.6 to 53.8 in "	
Russia.....	1864. 10.9 to 12.6 in "	
Austria.....	1869. 19.6 to 21.7 in "	
Spain.....	1860. 18.5 to 20.6 in "	
Italy.....	1860. 16.3 to 18.6 in "	

There are two origins of very large fortunes. First, the founders may have been persons of great ability to make combinations,—such combinations as reduce the cost of collection and distribution of goods.

<sup>1</sup> "Industries and Wealth of Nations," p. 379.

Combinations that do this save, first, to the producer, who can get more for his goods, and, second, to the consumer, who is saved something in the expense of procuring his food, clothing, fuel, etc. from the producer. This class of wealthy men helps society by reducing the number of the middle-men, and by managing more efficiently collection and distribution. The laying of a pipe-line from the oil regions in the West to the great commercial markets and centres of distribution on the Atlantic coast, for instance, saves immensely in the distribution of oil; rendering it possible for the producers to lower the cost of oil in the cities of the East to one-third its former price: at the same time it enables the oil company itself to amass large fortunes on the balance of saving reserved for its stockholders. Another example is furnished by the trunk railroads connecting the Atlantic with the Mississippi Valley. Vast combinations of capital consolidate roads into through lines; and, by building extra tracks, using steel rails, larger engines, and better cars, the cost of freight, which, thirty years ago, was from three to four cents a mile, is reduced to one cent a mile per ton. The amount of money added to the fortunes of the capitalists by these combinations is enormous; but the amount of money added to the value of Western farms, oil-wells, mines, and house property, by saving in the cost of transportation, is much larger than the amount that capital obtains for its combinations. Besides this, the consumers resident on the Atlantic coast, engaged in manufactures,—the consumers of the agricultural product of the West, pay but one-third as much for transportation on the bread materials, the coal, and the other items brought by railway, and thus share in the aggregate of saving made by the financiers who created, by the aid of capital, the combinations which decrease the cost of connecting producer and consumer. Is it too much to estimate the saving to the producers and consumers at ten times the amount saved by the railroad managers? The total freight charge of the railroads, for instance, for the year 1890 was upward of one billion dollars, and of this one hundred and forty-five million was net profit; but the net profit to the producers and consumers, over the cost of transporting the same materials by the railroad, as it was thirty years ago, must have been nearly two billions.

Take, for further illustration, one other example: viz, the wealthy man who saves vast sums to the producers and consumers by cheapening the process of connecting the raw material with the consumer of the manufactured product,—or the manufacturer who, by unstinted use of capital, improves his processes to such an extent that he increases the



amount of product per laborer and at the same time the quality of the product. Take still another class of wealthy men who build an improved kind of dwelling-house or invest immense sums in business houses or public works to light and heat a city or furnish it with pure water or any other hygienic appliances. This class saves a vast expense to the community as a whole, and takes to itself its proportion of the saving made, by way of profit on its investment.

This class of capitalists may be called "captains of industry." They save substantially for the whole of the community. They make useless, it is true, vast numbers of middle-men (who levy a larger toll than is necessary on the transfer of the goods from the producer to the ultimate consumer); but at the same time they open new vocations for a still larger number of persons than they have displaced from these middle positions. The increase of the manufacturing quota of the United States over the quota of the population engaged in producing raw material in the past thirty years proves this, that the captains of industry open new vocations for labor and assist in the readjustment of vocations. The new employments opened by capital are of a kind requiring higher skill in the laborer. They require of him more directive power and less exercise of bone and muscle. They lay a greater demand on the directive power of the brain than on the unskilled hand.

A second class of wealthy men limit their combinations to the stock-market. They speculate in the stocks belonging to the substantial enterprises of the first class of wealthy men, namely, those who make business combinations. Neither class can be said to make their money to any extent by "grinding the poor"; for the first class have earned much more for society as a whole than they have accumulated as profits.

It is evident that careful statistics should be obtained, showing what capital has done and is doing in the way of bringing together the producer of raw material and the consumer of the ultimate product by decreasing the expense of this transfer; how much it has done to readjust the vocations of those persons who were working at employments which have become obsolete, and to place them in positions where their daily labor contributes far more to the benefit of the entire community. In other words, what are the statistics regarding the use of capital in this important matter of diversifying human labor and increasing its wages?

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